

**WHAT IS CLAIMED IS:**

1. An inspection robot adapted to traverse the interior of a pipeline for the purpose of checking the coating at the interior surface of the pipeline at the weld seams thereon to determine the thickness of the coatings and for detecting for voids or holidays by means of a conductive brush that sweeps against the weld seam and emits a spark when a void is encountered, the spark emission causing a holiday marker to activate and mark the pipeline interior surface so that the site can be revisited for repair, a mil gauge probe mounted on a slideable plunger for measuring coating thickness on the weld seam and providing data via a digital mil gauge readout, the conductive brush, the slidable plunger for the mil gauge probe, the digital mil gauge readout, and a forward portion of the robot all being provided with cameras which simultaneously record the movements and data encountered by the inspection robot to provide real-time feedback to a remote operator.
2. An inspection robot as set forth in claim 1 wherein the holiday marker is a spray unit located adjacent the conductive brush such that when the conductive brush emits a spark, the spray unit will be actuated to place a circumferential mark on the inner circumference of the pipeline adjacent the weld seam and wherein the actuation of the spray unit will cause the brush to rotate in a reverse direction against the inside of the pipeline following which the holiday marker will again be actuated to spray a second circumferential mark on the interior of the pipeline adjacent to the weld seam.
3. An inspection robot as set forth in claim 1 wherein the conductive brush is mounted on an air cylinder and wherein a signal to the air cylinder will cause the brush to move against the interior surface of the pipeline at the weld seam.

4. An inspection robot as set forth in claim 3 wherein the conductive brush is retracted from contact with the interior surface of the pipeline and wherein the slidable plunger is actuated thereafter to cause the mil gauge probe to move against the interior surface of the pipe and then retract.

5. An inspection robot as set forth in claim 1 wherein the robot is provided with an antenna capable of transmitting information concerning the cameras and operation of the holiday detector and the mil gauge probe to a remote antenna mounted on a remote unit and in communication with the antenna on the robot, the remote unit being operated by a remote operator having a remote controller and a video display whereby the remote operator can actuate the inspection robot to perform any of the functions performed by the inspection robot.

6. An inspection robot as set forth in claim 5 wherein the inspection robot is mounted on motorized wheels for moving the robot longitudinally down the pipeline and wherein the remote operator, through the remote controller can cause the inspection robot to move down the pipe while the remote operator guides the movements through one or more of the cameras provided.